

FIG. 1A

PRIOR ART

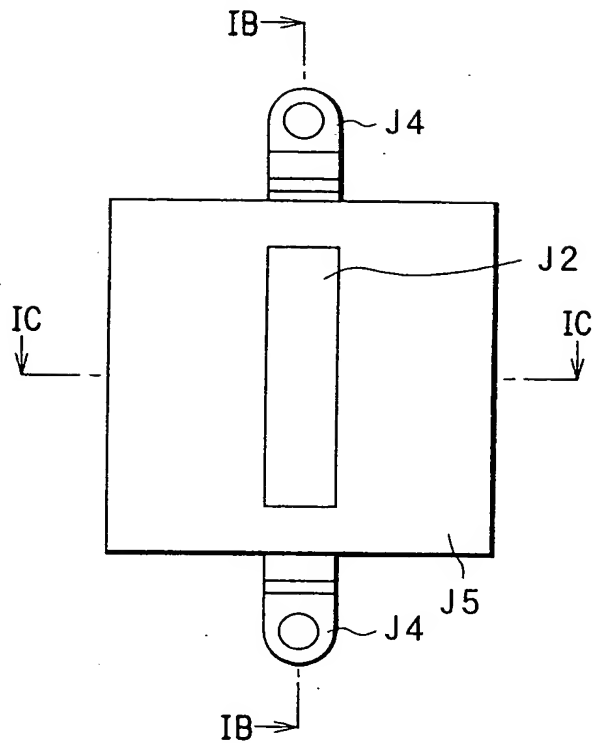


FIG. 1B

PRIOR ART

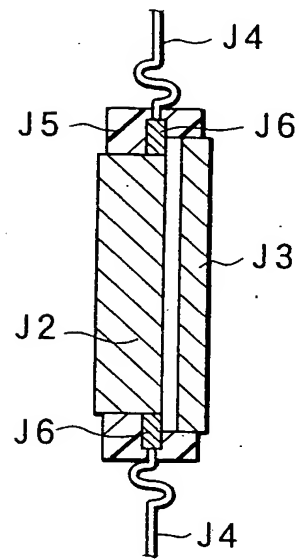


FIG. 1C

PRIOR ART

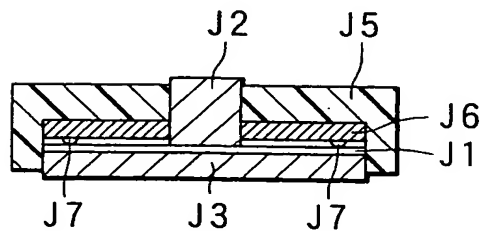


FIG. 2A

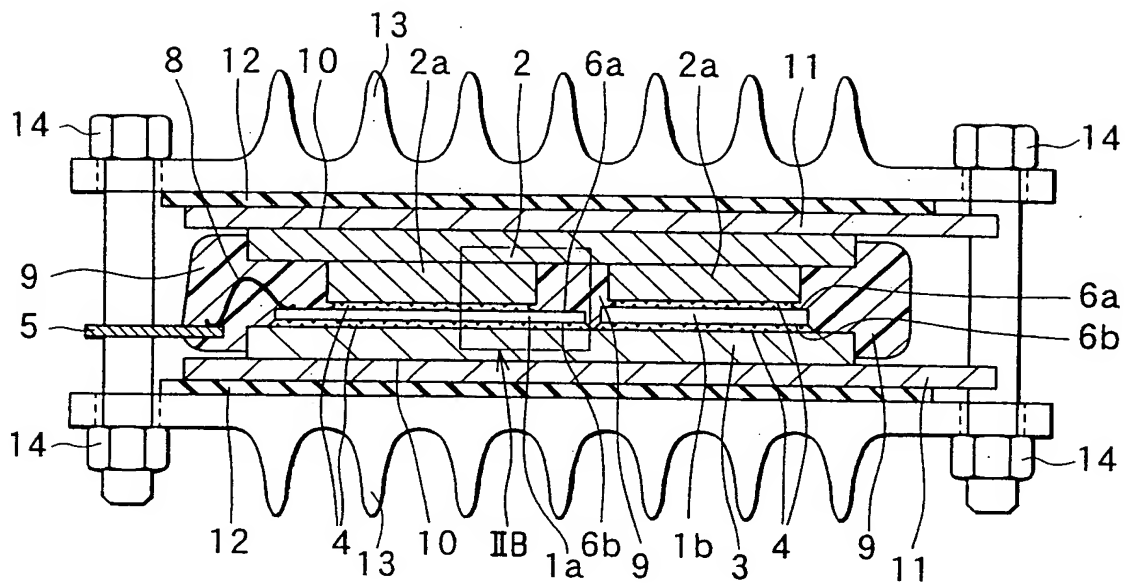


FIG. 2B

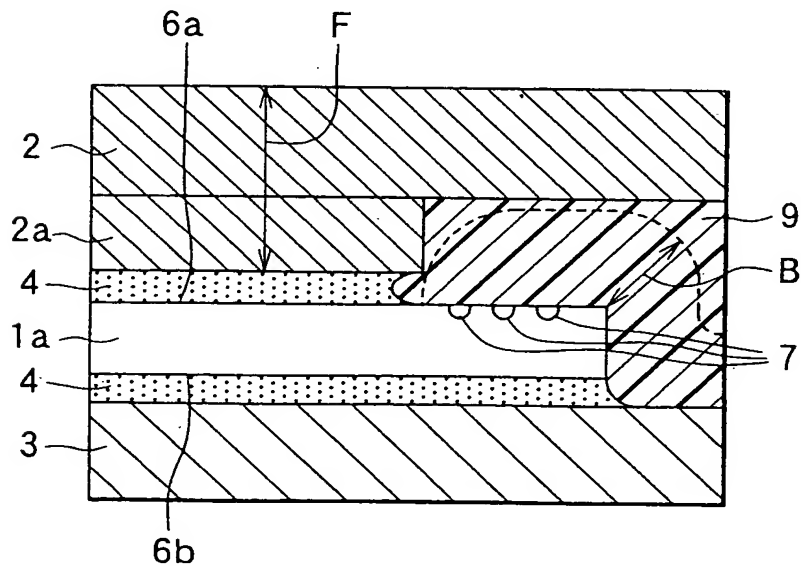


FIG. 3

NAME OF METAL	CHEMICAL COMPOSITION (%)													
	Fe	Zn	P	Ni	Si	Sn	NiB	Mn	Mg	Cr	Ti	B	Cu	Al
METAL a	2.3	0.1	0.03										REMAIN.	
METAL b	2.4	0.12	0.03										REMAIN.	
METAL c				3.0	0.7								REMAIN.	
METAL d	1.5	0.5				0.5							REMAIN.	
METAL e	1.0	0.05	0.1			1.0							REMAIN.	
METAL f	0.75		0.03			1.25							REMAIN.	
METAL g	0.05 0.15		0.025 0.040										REMAIN.	
METAL h	0.05 0.4		0.05 0.1			0.05 0.2	0.05 0.45						REMAIN.	
METAL i			0.15 OR LOWER	0.1 0.4		1.7 2.3							REMAIN.	
METAL j		0.2 0.35		3.0 3.4	0.6 0.75	1.0 1.5							REMAIN.	
METAL k	0.12 1.0	0.03 0.1			0.1 1.0			0.02 0.05	0.02 0.05		0.02 0.05		0.03 0.2	REMAIN.
METAL l	0.5	0.1			0.3 0.7			0.05	0.35 0.5	0.03		0.06	0.1	REMAIN.

FIG. 4A

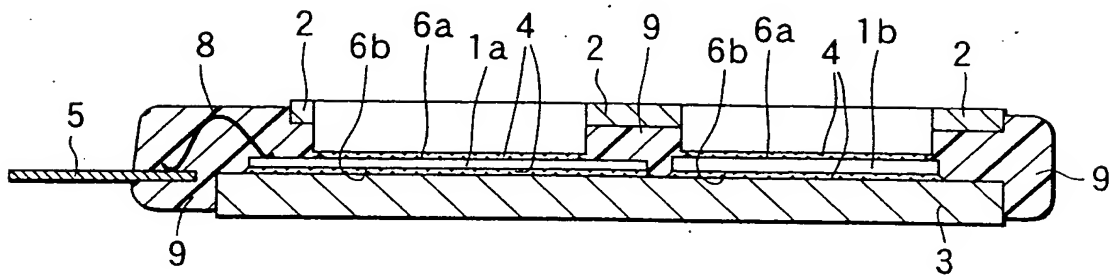


FIG. 4B

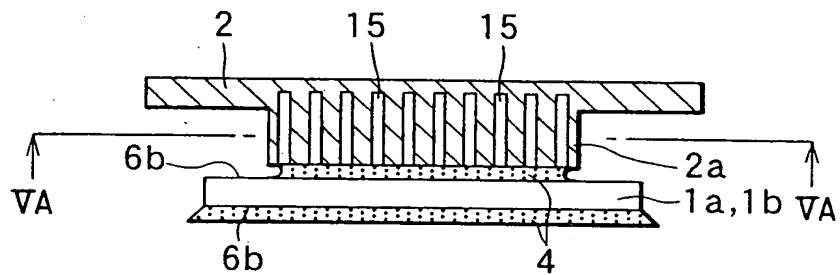


FIG. 4C

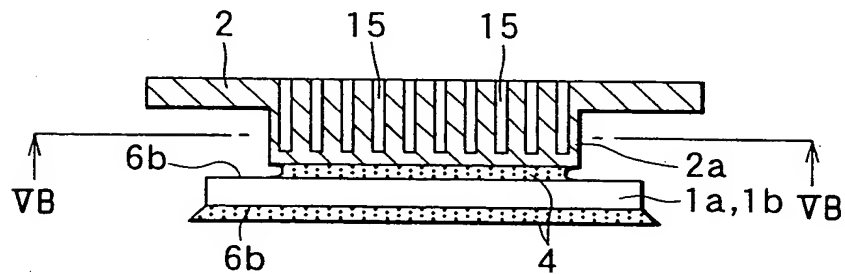


FIG. 4D

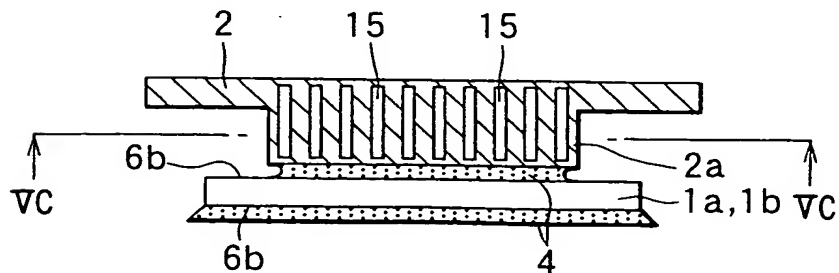


FIG. 5A

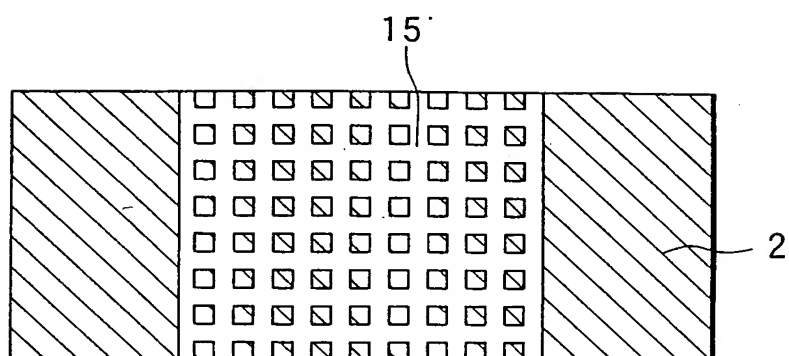


FIG. 5B

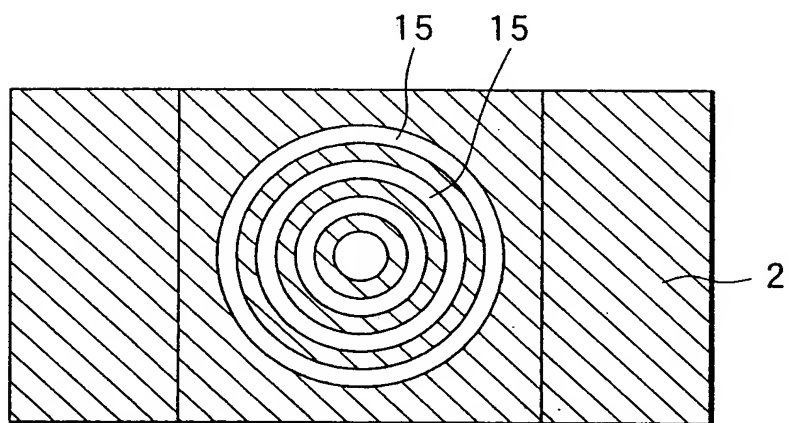


FIG. 5C

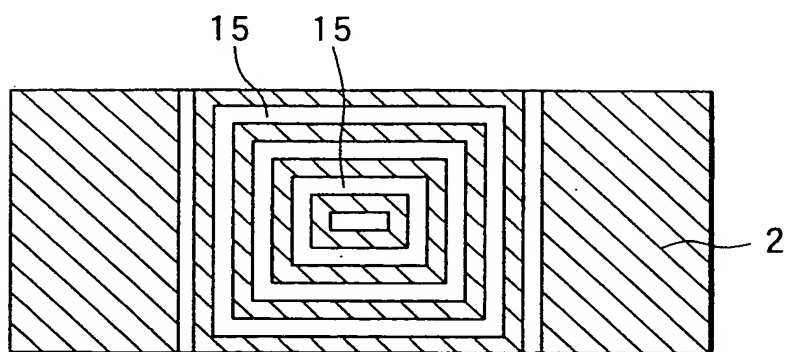


FIG. 6

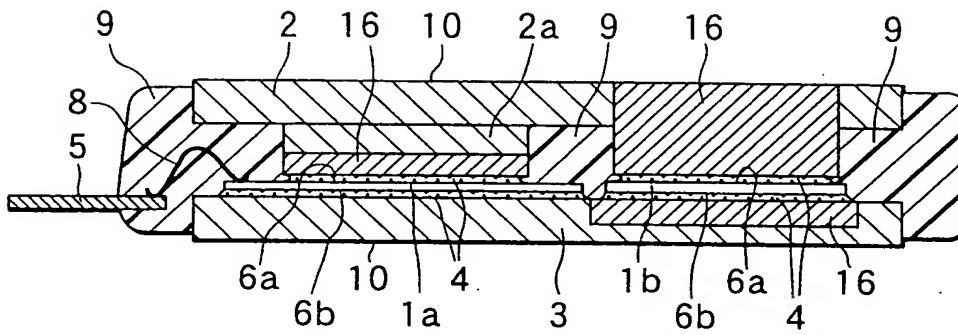


FIG. 7

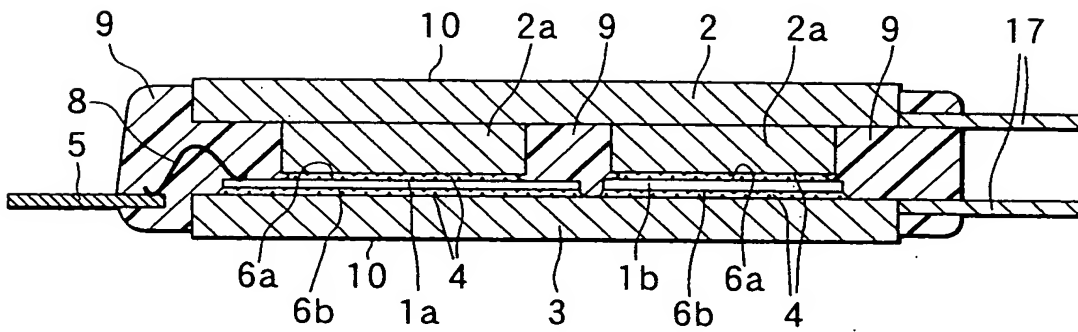


FIG. 8A

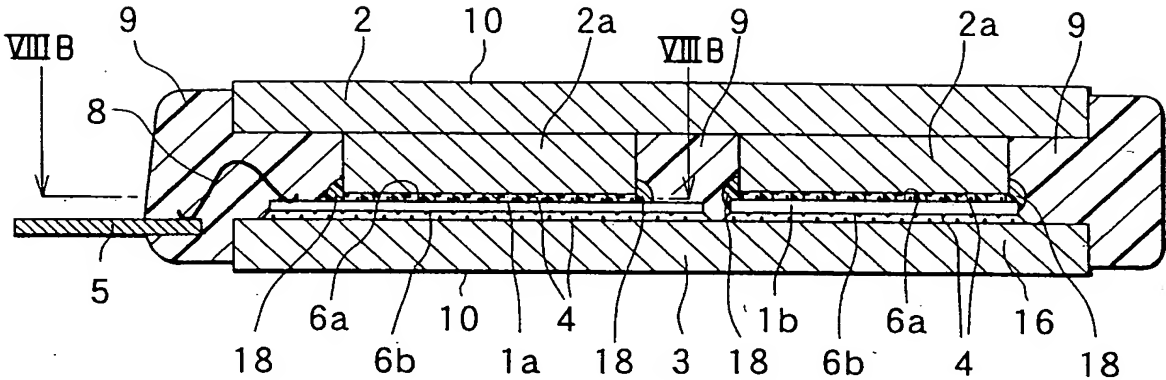


FIG. 8B

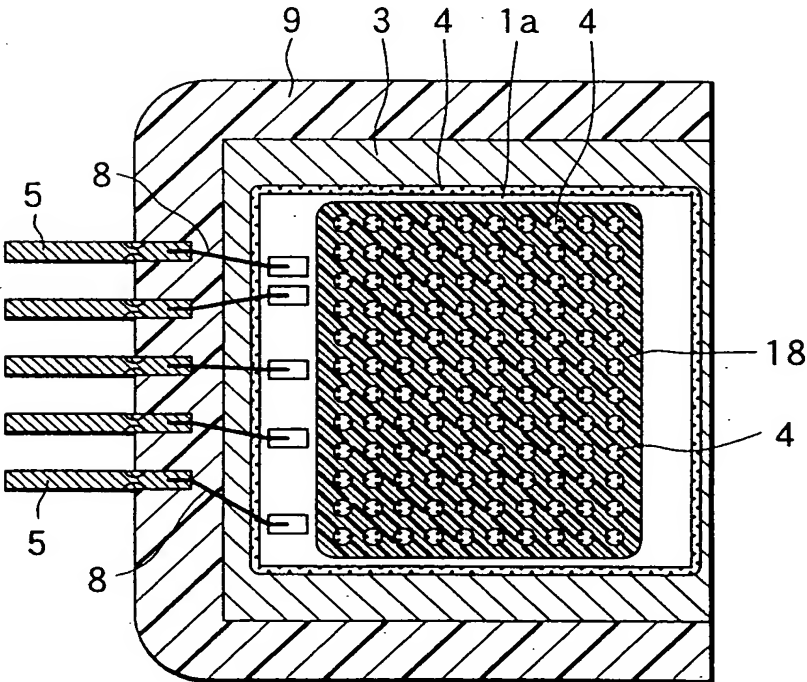


FIG. 9A

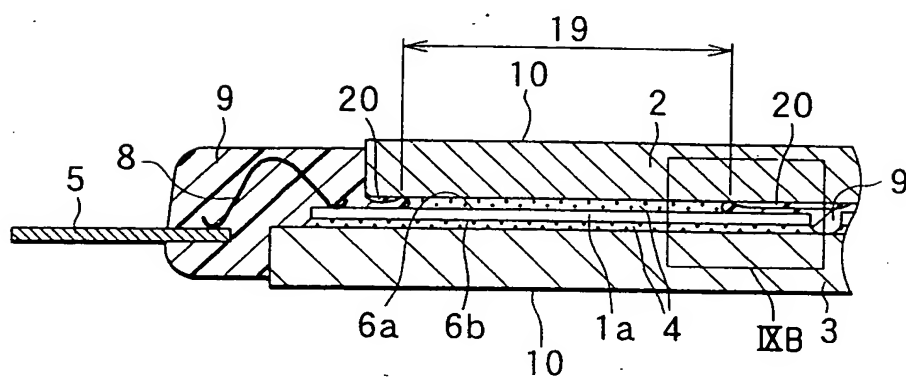


FIG. 9B

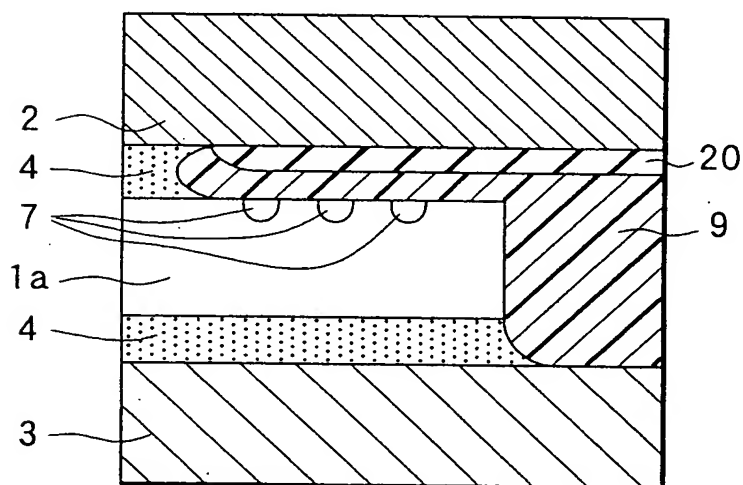


FIG. 9C

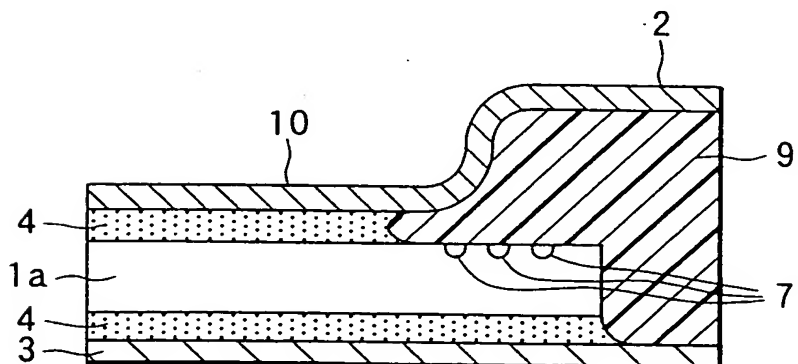


FIG. 10

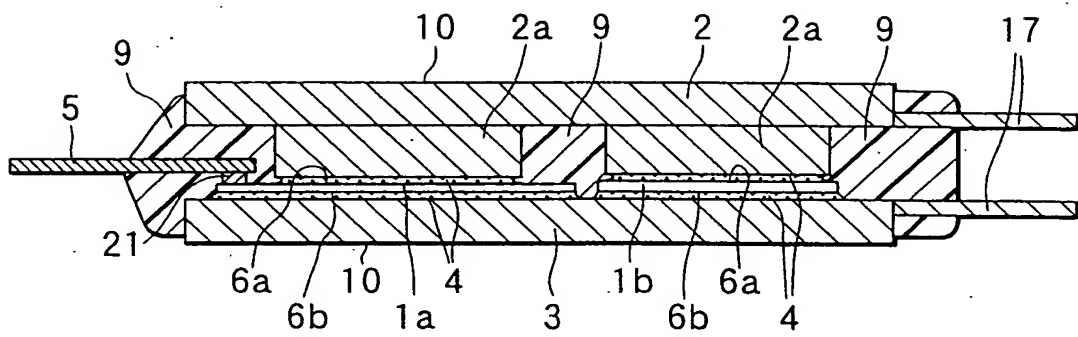


FIG. 11

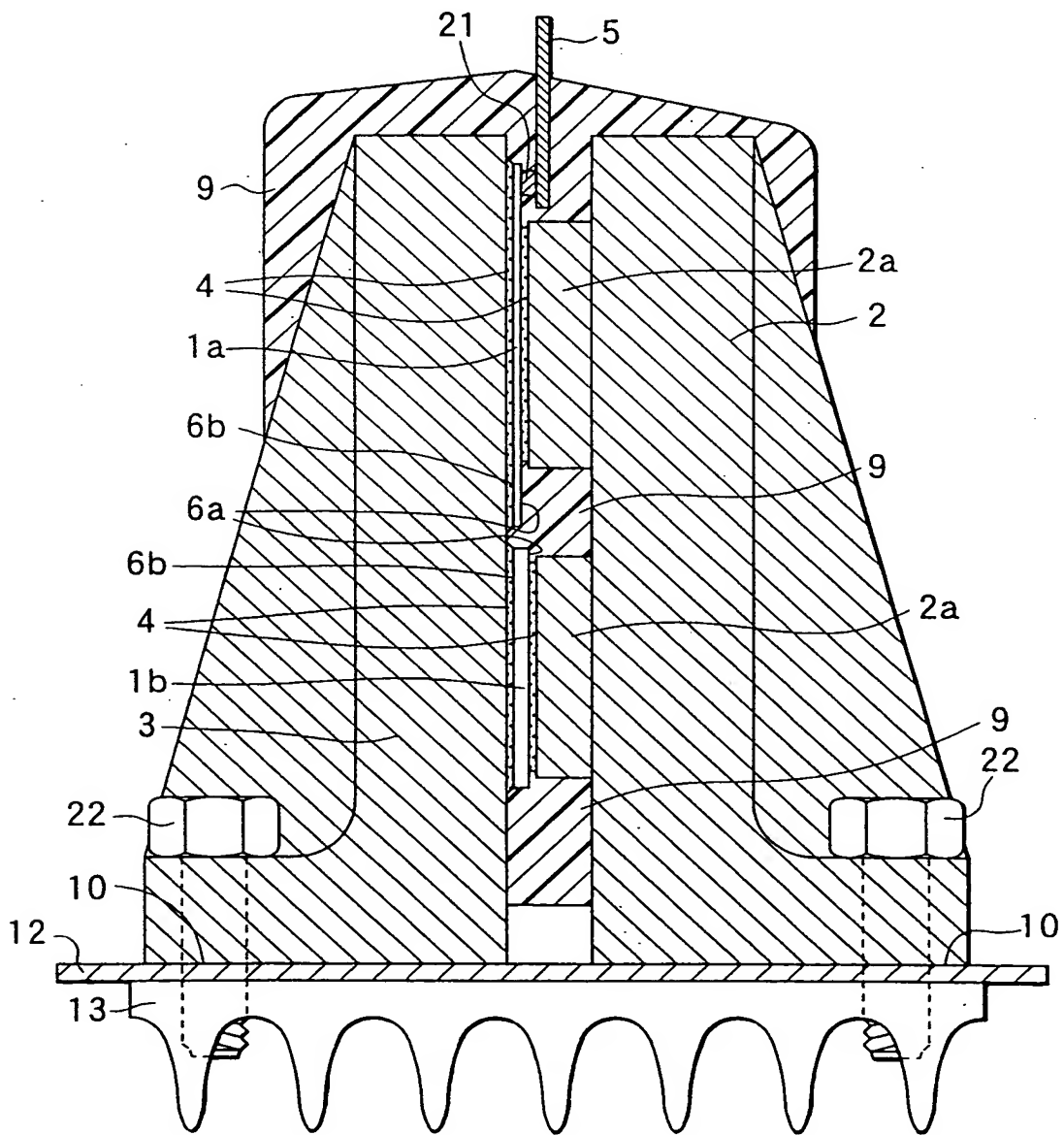


FIG. 12

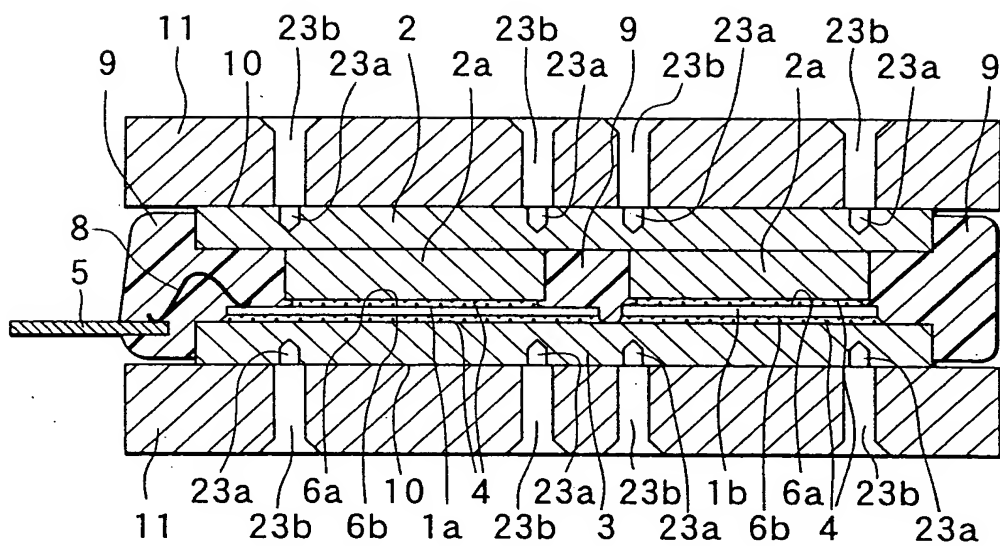


FIG. 13

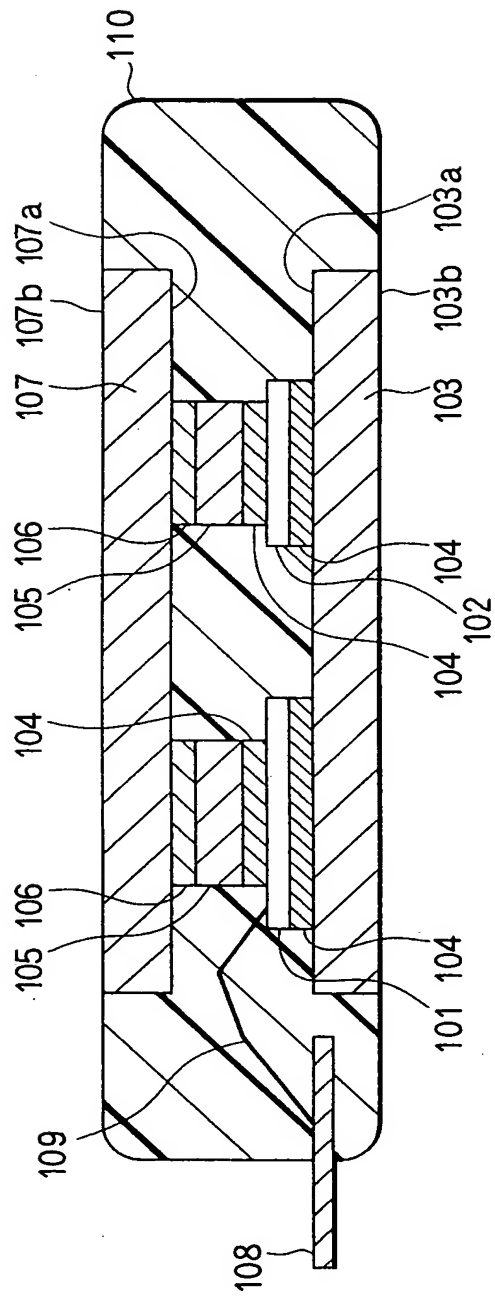


Figure 1 is a cross-sectional view of a semiconductor device 150. The device 150 is formed on a substrate 103. The substrate 103 is divided into two regions, 103a and 103b. On region 103a, there is a stack of three layers: a bottom layer 104, a middle layer 102, and a top layer 105. A similar stack of layers 104, 102, and 105 is formed on region 103b. The layers 104, 102, and 105 are shown with different hatching patterns to distinguish them.

[illegible]

FIG. 18

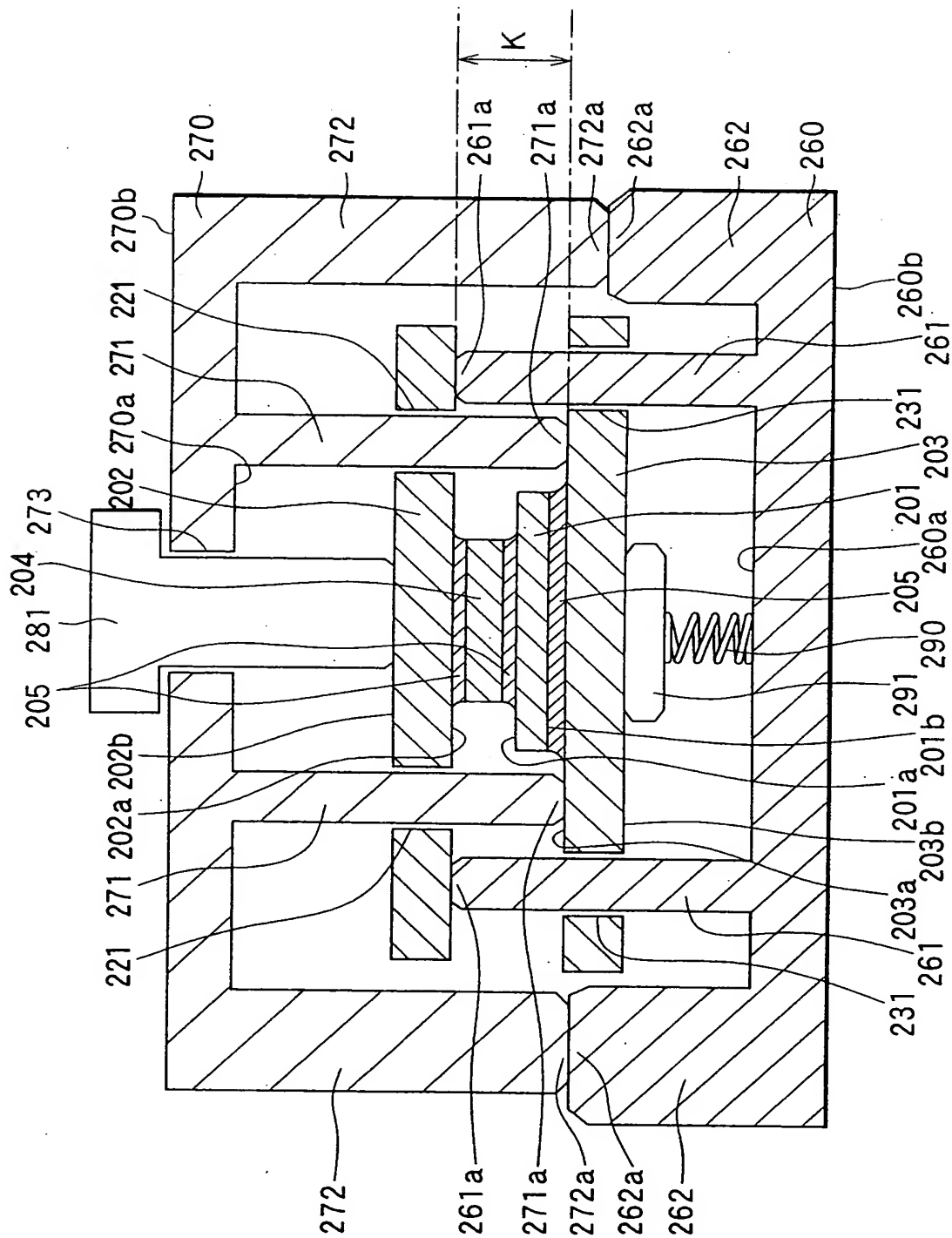


FIG. 19

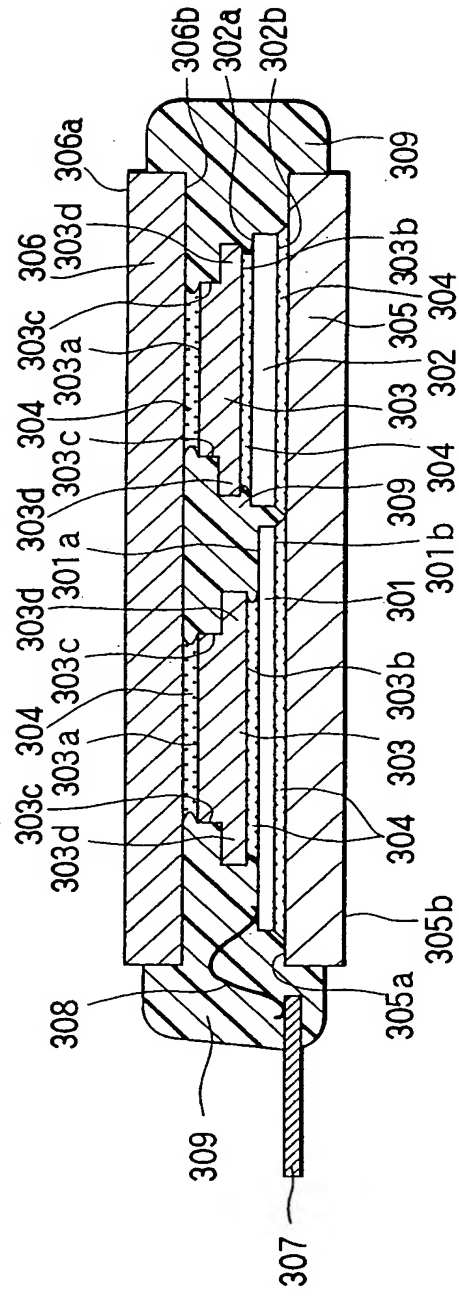


FIG. 20A

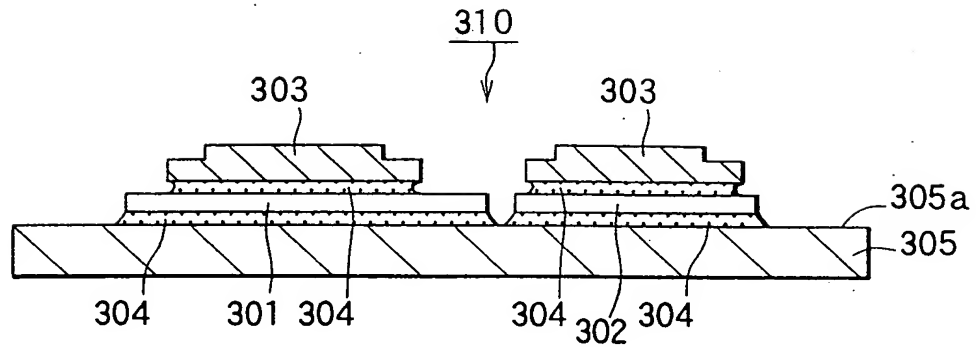


FIG. 20B

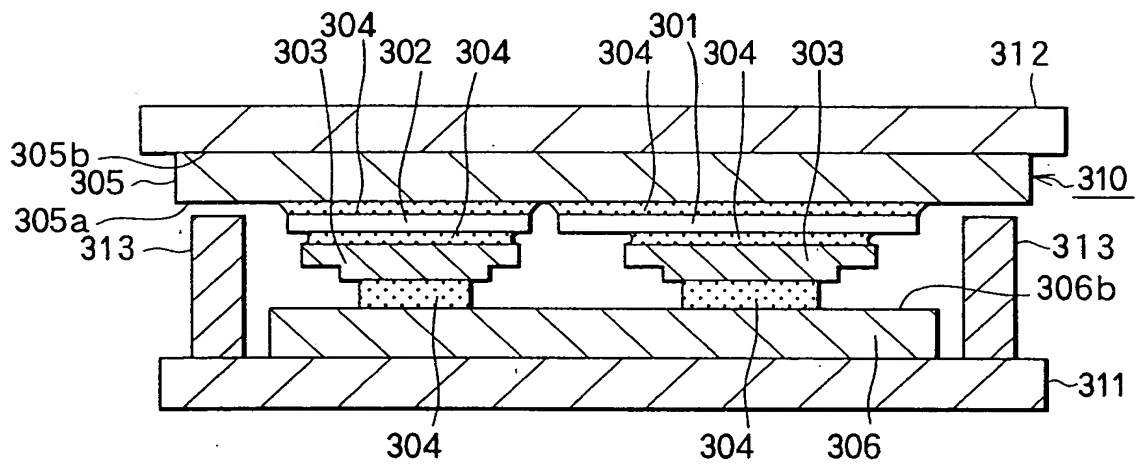


FIG. 20C

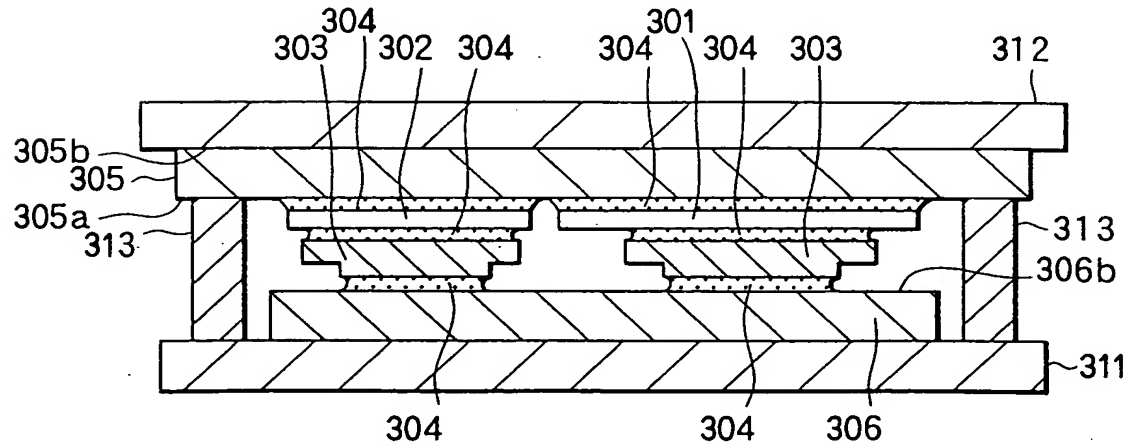


FIG. 21

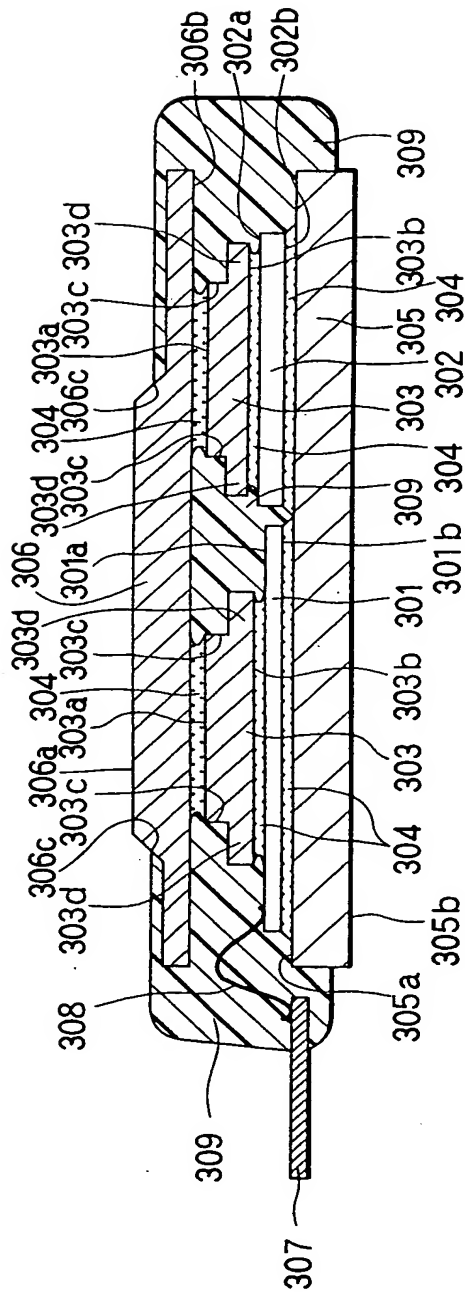


FIG. 22

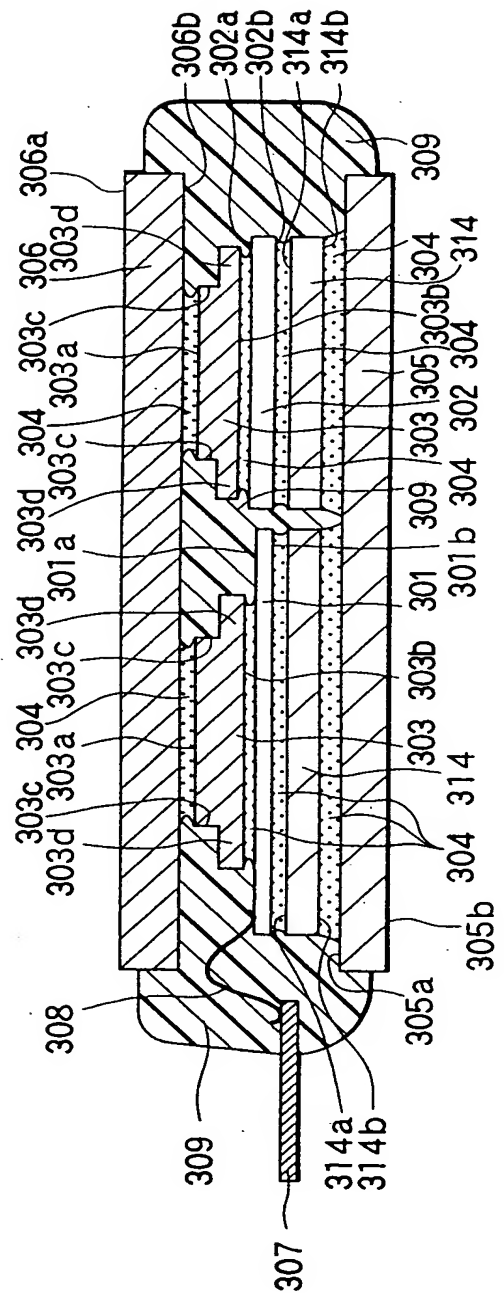


FIG. 23

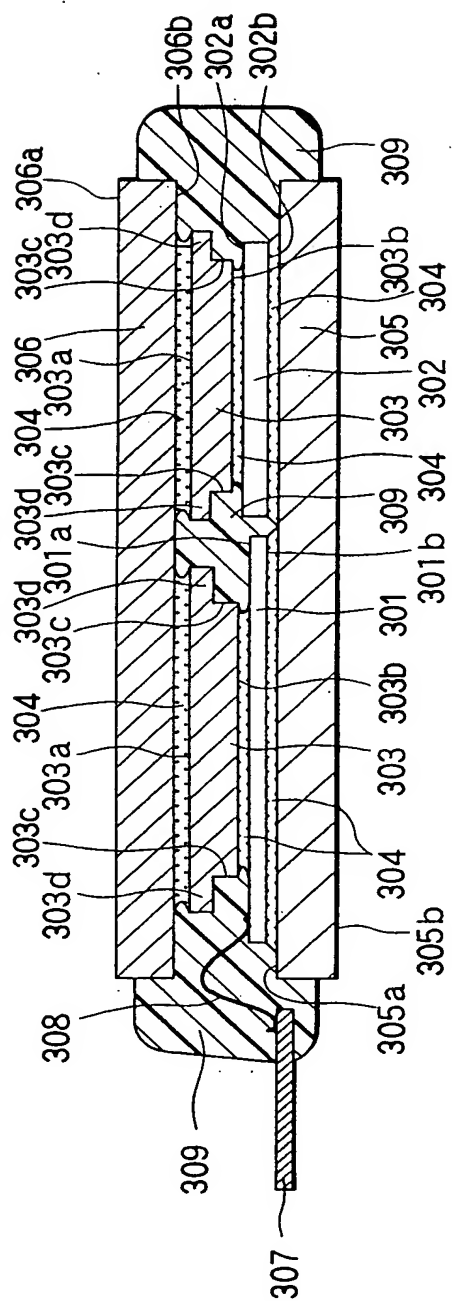


FIG. 24

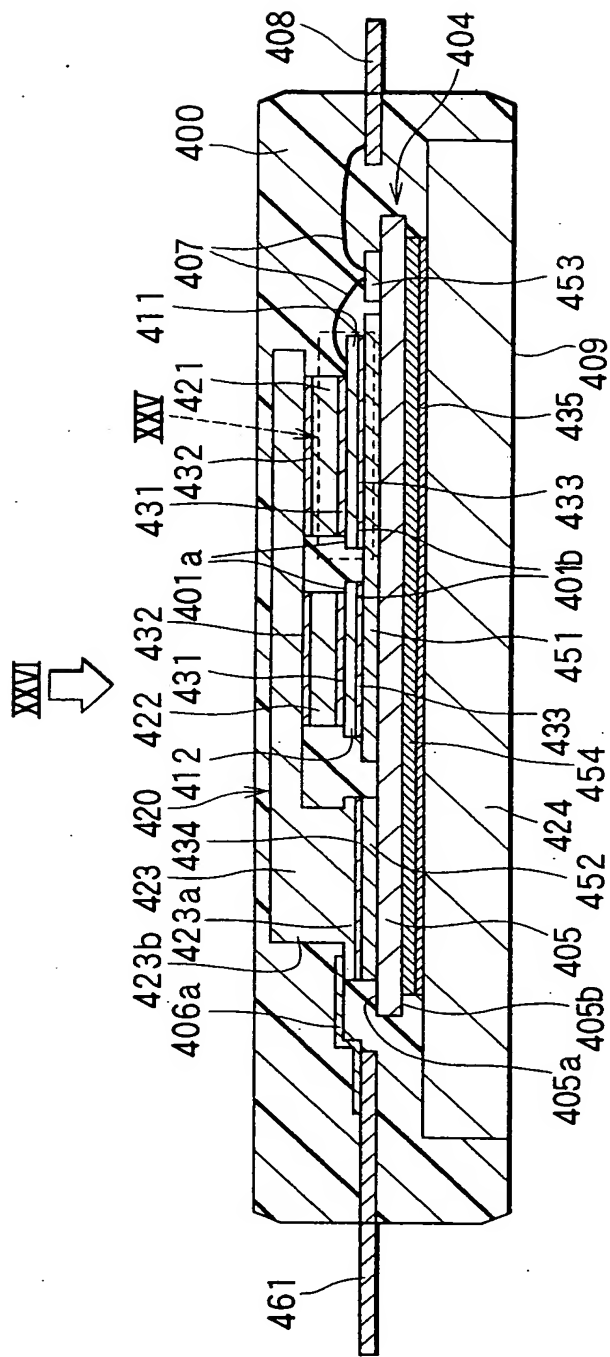


FIG. 25

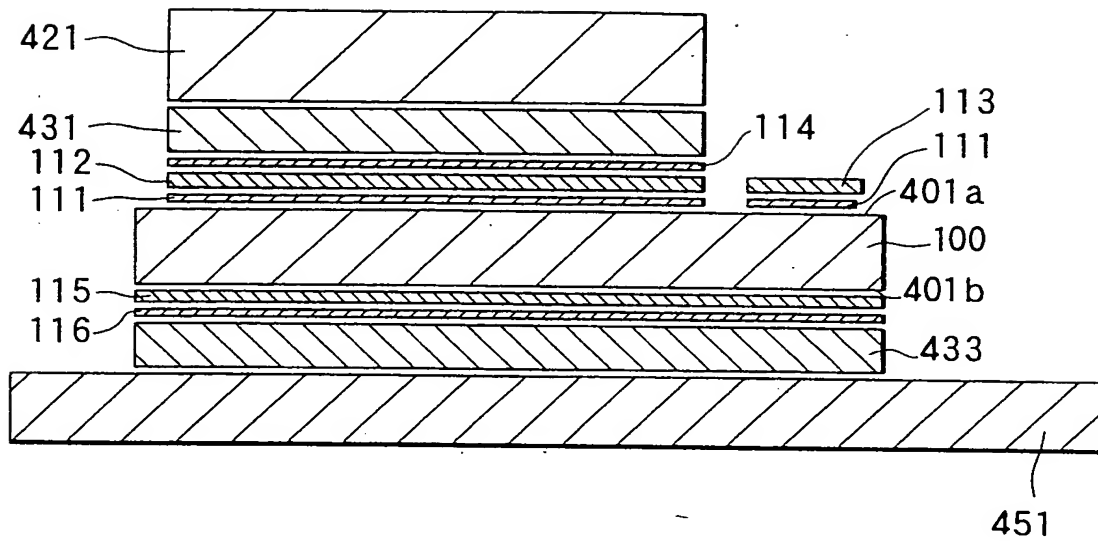


FIG. 26

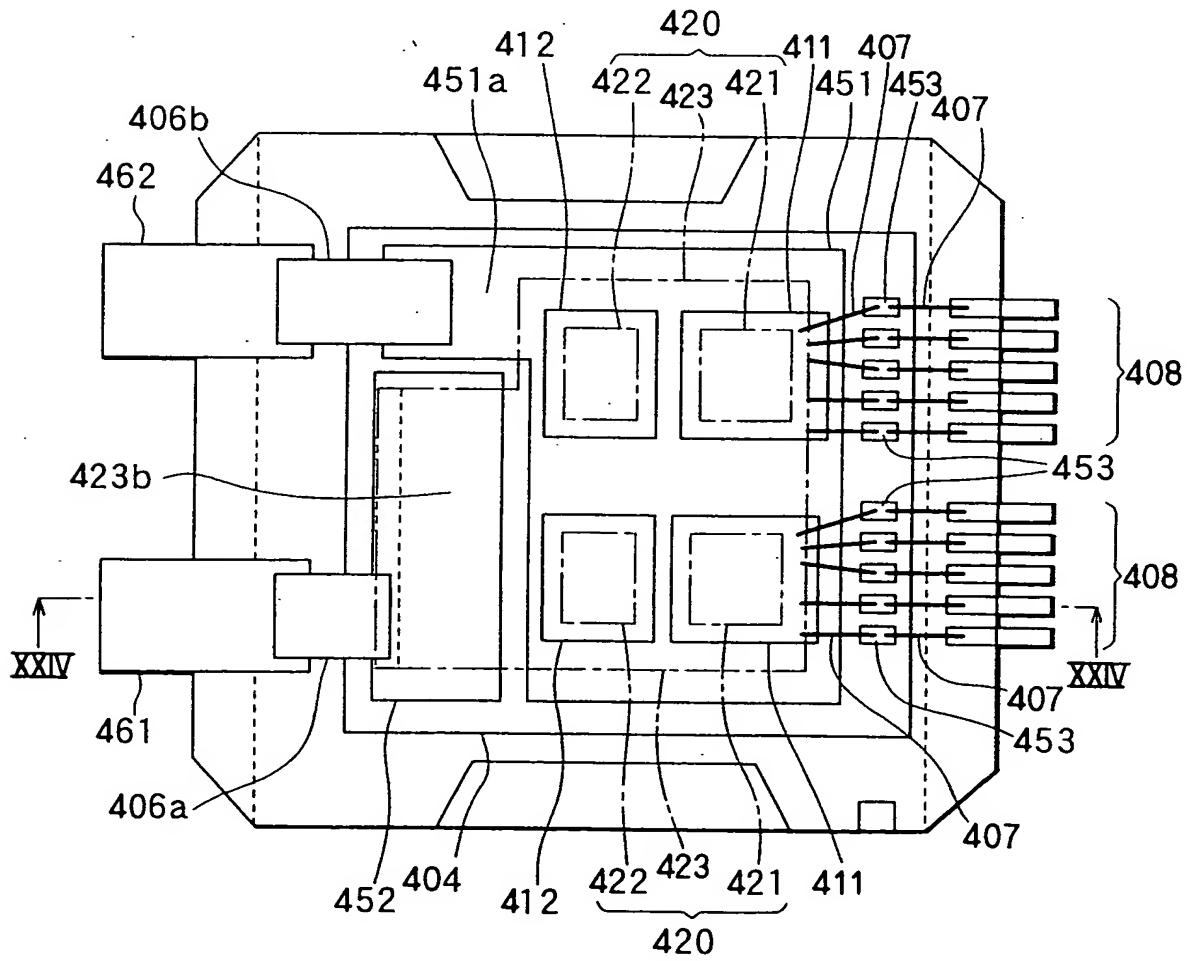


FIG. 27

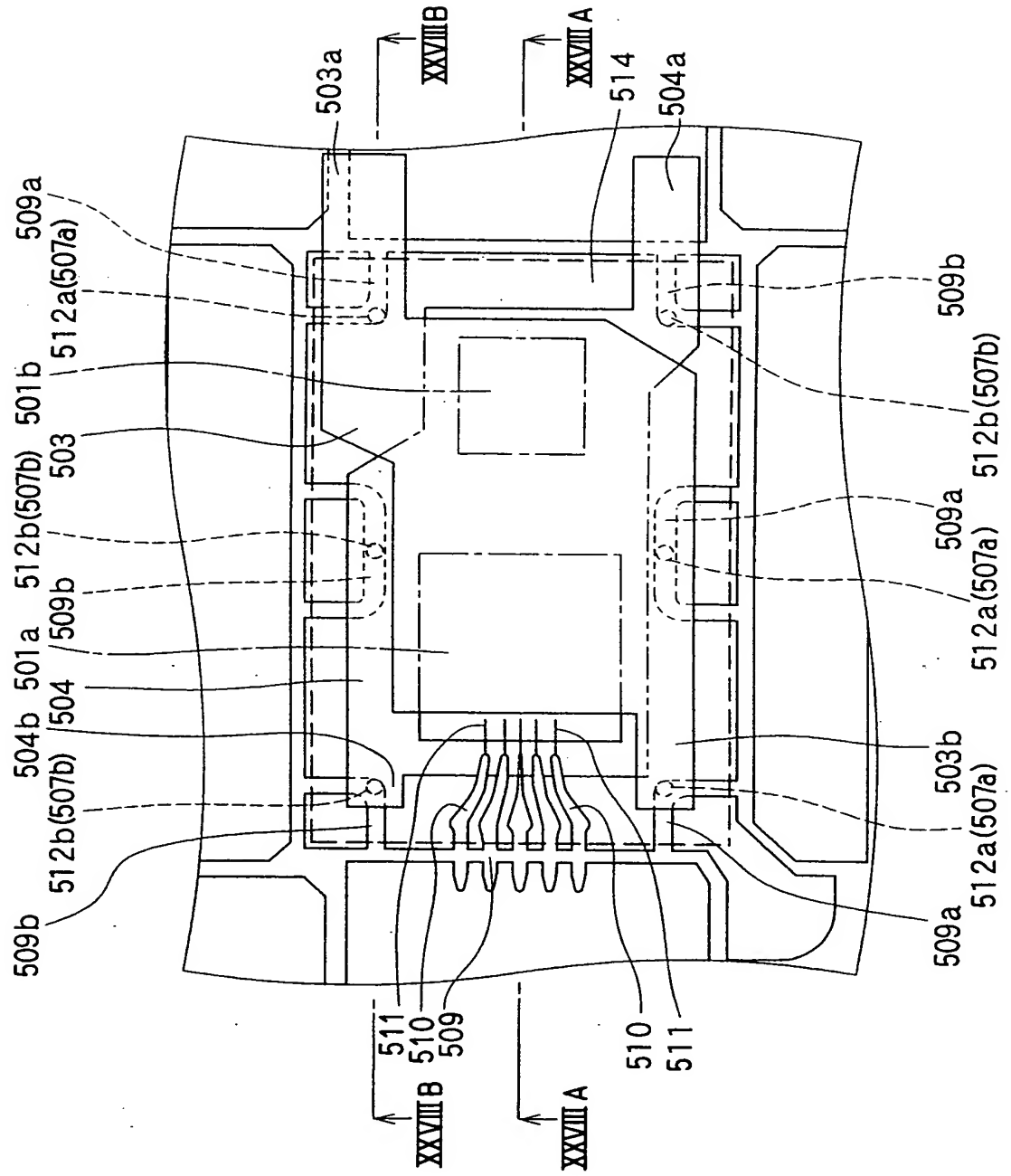


FIG. 28A

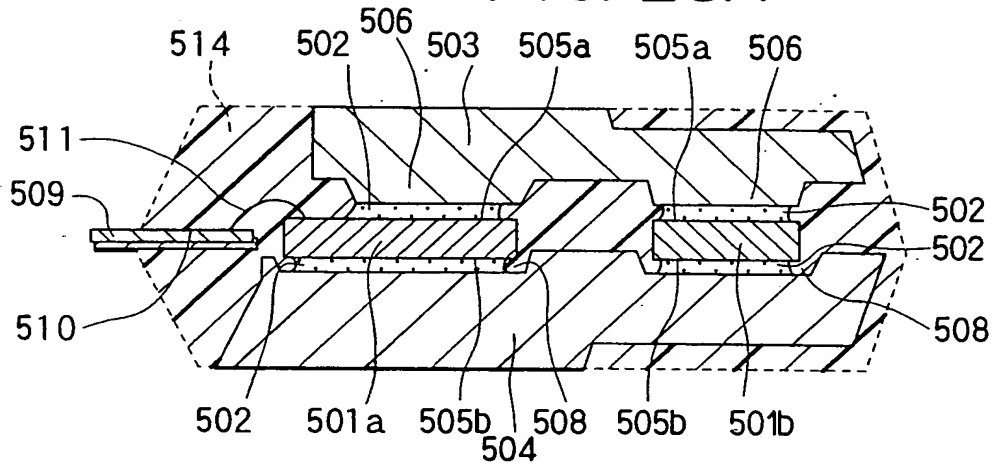


FIG. 28B

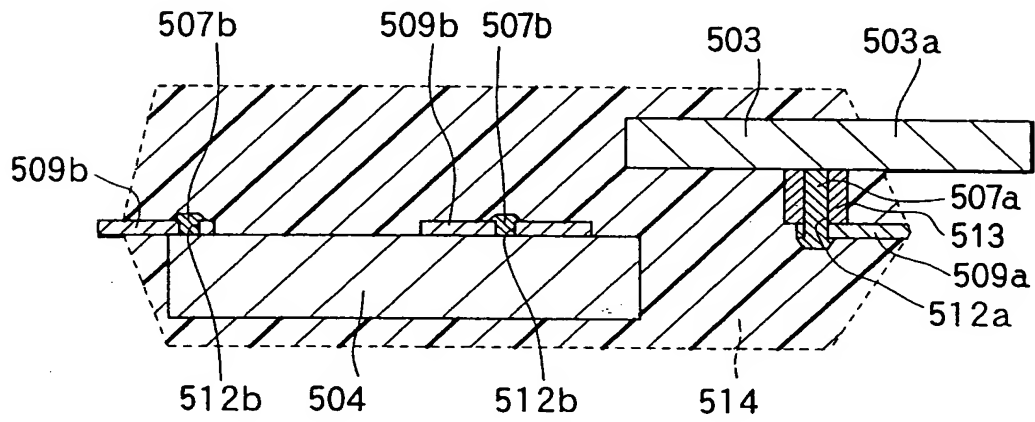


FIG. 29

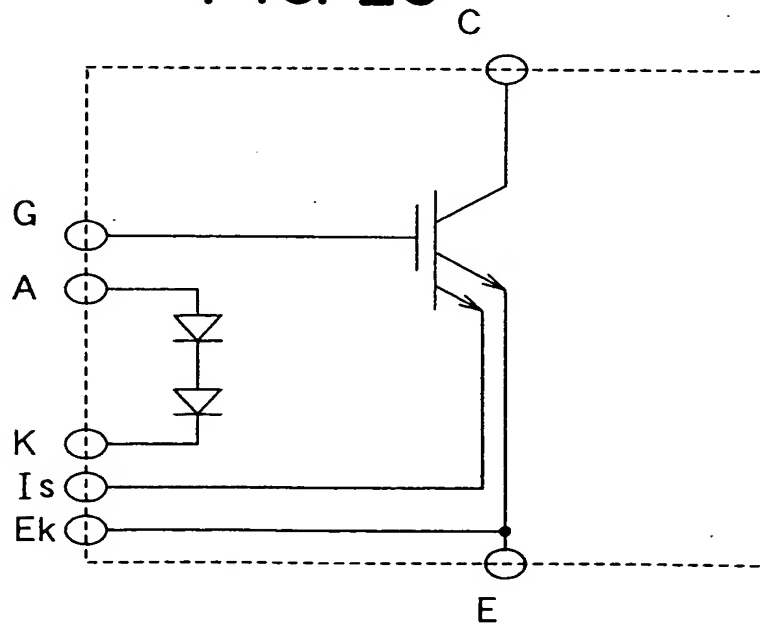


FIG. 30A

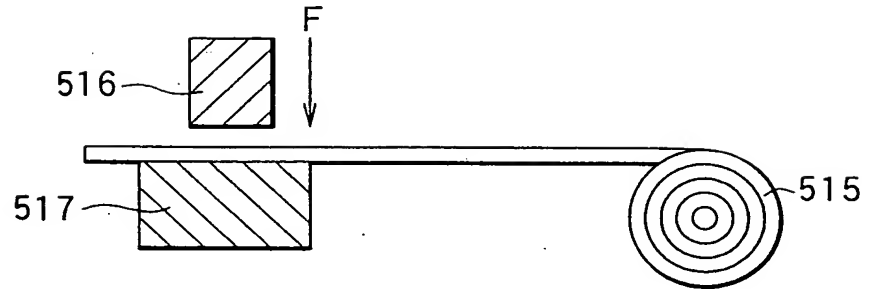


FIG. 30B

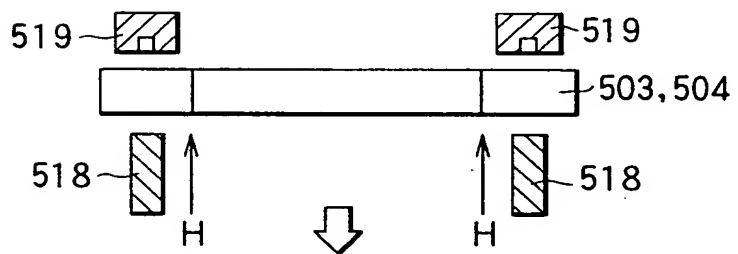


FIG. 30C

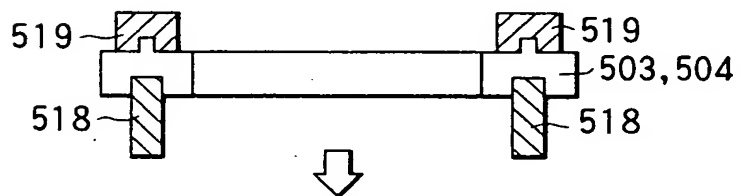


FIG. 30D



FIG. 31

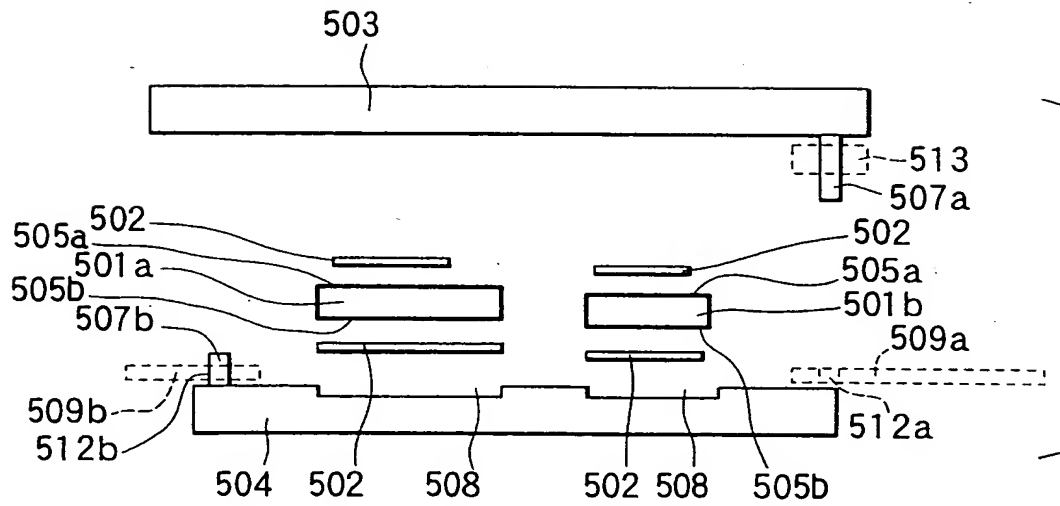


FIG. 32A

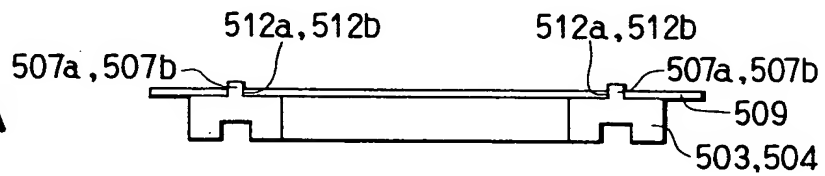


FIG. 32B

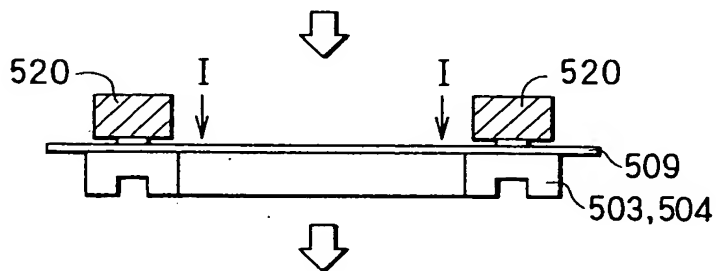


FIG. 32C

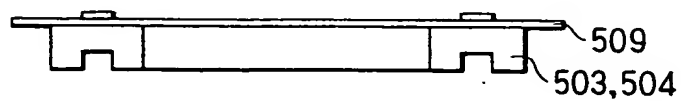


FIG. 33

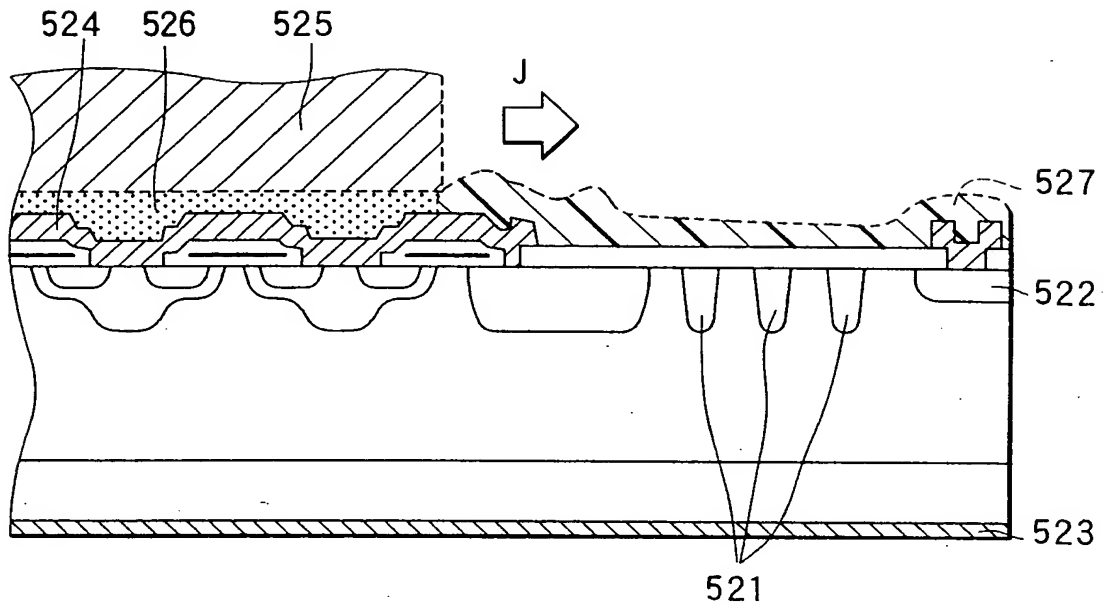


FIG. 34

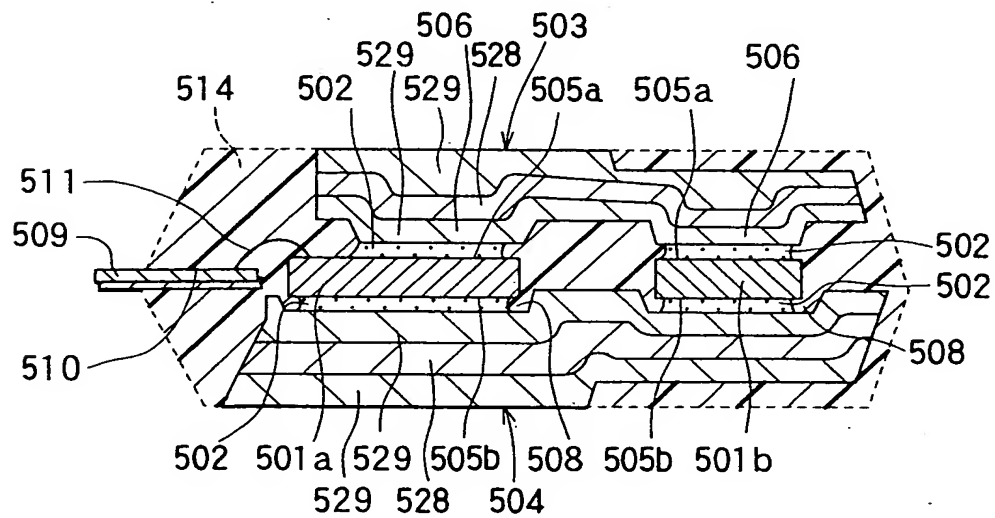


FIG. 35A

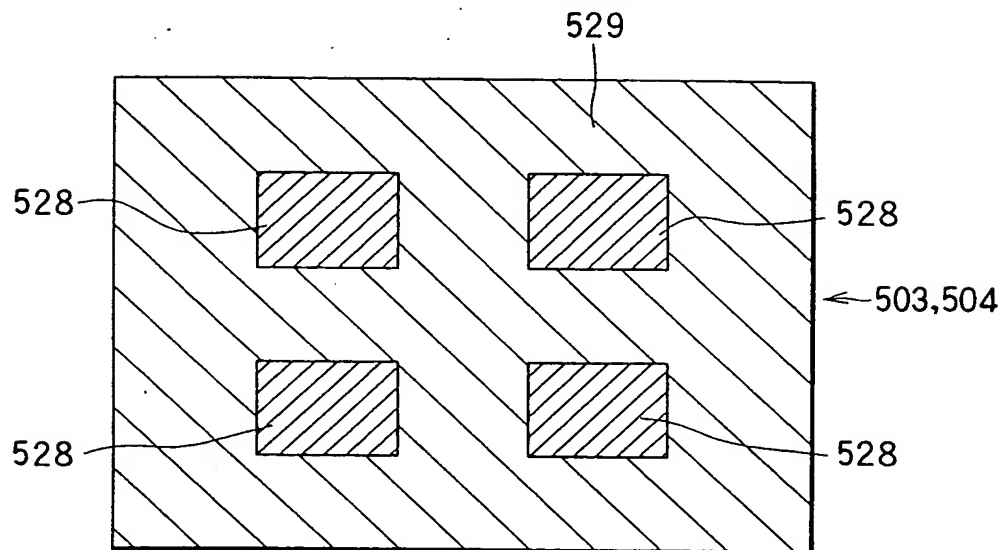


FIG. 35B

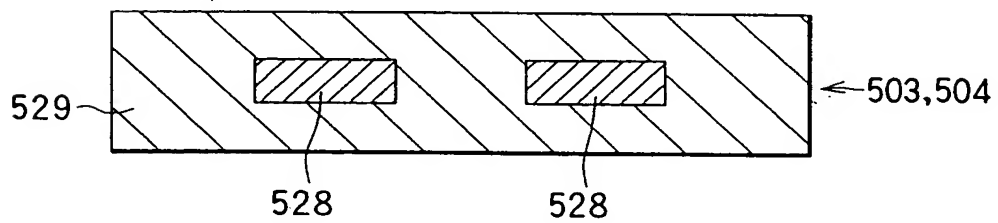


FIG. 36

